

**INSTRUCTIONS FOR COMPLETING
FORM DEP 7007K
SURFACE COATING (OR) PRINTING OPERATION**

The following definitions should be used when entering the requested data. In the K form,

“Emission Point” is defined as a coating line.

“Line” is defined as a series of equipment or operations used to apply, dry, or cure coatings.

“Applicator” is defined as the individual equipment, device, or mechanism used to apply coatings.

These definitions are intended to be consistent with regulations found in Title 401 of the Kentucky Administrative Regulations and their proper use will greatly aid in the permitting process.

- 1) Assign the emission point a number. Each point number should be unique.

Identify when construction started if the event has already occurred. Otherwise, project when construction on the point may start.

- 2) Use literature, material balances, stack testing data, or other credible sources to identify pollutants emitted from the emission point. Engineering estimates may be used but accompanying calculations should identify the factors used to make the engineering estimate.

- 3) Describe the function and working parts of the emission point. Include Make and Model numbers if the unit was purchased from a supplier and the information is available. For example,

“EP01 is an 8’ x 8’ x 8’ Devilbiss Model XDF #529 three sided spray booth that utilizes fabric filters and only one Grayco Model CFA-10 air spray gun.”

“At EP01 paint and thinner are sprayed onto a taped piece of wood.”

“After the tape is removed, EP01 produces specialty signs mostly displayed in department stores.”

“EP02 is a Cerutti Model CPS Corp. # 1548 Rotogravure Press. The main parts of the press are an unwind station, six 40” wide printing cylinders, an oven with one 0.36 MM Btu/hr burner, and a cutting station. (In this order)”

“At EP02 paper, ink, varnish, and thinner are the raw material used. Natural gas is used to heat the oven.”

“EP02 makes Christmas wrapping paper.”

“EP03 is a custom manufactured adhesive tape manufacturing line. The line has the following machinery in the following order: an unwind station, a corona treater, a release coating station, a release coat oven, an acrylic coating station, an acrylic coat oven, a fiber reinforcing station, a hot melt extruder, a chiller cylinder, and a rewind station.”

“At EP03 release coating, adhesives, and cotton fibers are applied to paper and plastic film. Natural gas is combusted in the ovens to dry the coatings.”

“After the product is cut to the desired size, EP03 makes duct tape and Scotch tape.”

- 4) On a separate sheet, make a flow chart or drawing that contains all of the requested information.

- 5) All categories, except for other, are related to regulations that may apply to the emission point. Choose the category that best describes the emission point. Applicability dates and additional descriptions of the categories can be viewed in the following regulations.

Category

A. Auto or Light-duty Truck Coating

B. Metal Furniture Coating

Regulations

401 KAR 59:315, 401 KAR 61:090,
and 40 CFR 60 Subpart MM

401 KAR 59:315, 401 KAR 61:105,
and 40 CFR 60 Subpart EE

5) *Continued from previous page:*

Category

Regulations

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| C. | Large Appliance Coating | 401 KAR 59:315, 401 KAR 61:110, and 40 CFR 60 Subpart SS |
| D. | Metal Coil Coating | 401 KAR 59:315, 401 KAR 61:130, and 40 CFR 60 Subpart TT |
| E. | Beverage Can Coating | 401 KAR 59:315, 401 KAR 61:125, and 40 CFR 60 Subpart WW |
| F. | Magnet Wire Insulation Coating | 401 KAR 59:190 and 401 KAR 61:100 |
| G. | Miscellaneous Metal Parts Coating | 401 KAR 59:225 and 401 KAR 61:132 |
| H. | Flat Wood Panel Coating | 401 KAR 59:214 and 401 KAR 61:124 |
| I. | Coating of Plastic Parts for Business Machines | 40 CFR 60 Subpart TTT |
| J. | Fabric, Vinyl, or Paper Coating | 401 KAR 59:210 and 401 KAR 61:120 |
| | Magnet Tape Coating | with possible overlapping requirements in |
| | Pressure Sensitive Tape and Label Coating | 40 CFR 60 Subpart SSS and 40 CFR 60 Subpart RR |
| K. | Graphic Arts Using Rotogravure & Flexographic Printing | 401 KAR 59:212 and 401 KAR 61:122 with possible overlapping requirements in |
| | Flexible Vinyl and Urethane Coating & Printing | 40 CFR 60 Subpart FFF |
| L. | Publication Rotogravure Printing | 40 CFR 60 Subpart QQ |

In addition to the above regulations, MACT standards may also apply. Refer to 401 KAR Chapter 63 and 40 CFR Part 63 for MACT details.

- 6) Identify products and solvents used to clean the emission unit. VOC emissions from cleaning are regulated by some Kentucky regulations. If only soap and water are used, so identify the cleanup type. Identify daily usage rates that will not be exceeded. Do not average weekly or monthly records to complete the data unless specifically allowed in your current Kentucky air permits.
- 7) Assign the applicator a number and describe what the applicator does. For example, “EP02, applicator #1 applies one color of ink to paper.” Each applicator at each point should be unique. If multiple applicators can be described identically in items 8 – 13, there is no need to make multiple copies of the page. For example, “EP02, applicators #1, #2, and #3 each apply a different color of ink to paper.”
- 8) Identify the applicator or applicators referenced in item #7.
- 9 - 11) Complete the items as instructed.
- 12) If the manufacturer of the applicator has provided a rated capacity for the applicator, enter the value provided unless the applicator has been modified from the manufacturer’s original setup. If the manufacturer has not provided a rated capacity for coating throughput, identify the capacity based on parameters such as maximum raw material throughput and maximum coating thickness. For example, if a dip coating tank can only coat a maximum of 40 foot of steel raw material each minute and the coating thickness at 40 ft/min is 5 microns, then surface area of the steel can be combined with this information to develop a capacity. Other bottlenecks and throughput limitations can be identified in item #13.
- 13) If there is any technical or machinery based reason for not being able to operate the applicator at the maximum capacity or 8760 hrs/yr, then the reduced capacity or hours of operation should be identified here and the reason for the limitation should be described.

For example, if a wheel manufacturer has a coating line that can coat 8 million wheels per year but the machinery that forms the wheels can only make 4 million wheels, then the coating line would be limited to half of its capacity (purchasing the machinery to form an additional 4 million wheels would require a permit application). However, using the same example, if 4 million wheels can be formed given the companies current workforce, then this is not a restriction (the company could hire more people without a permit application). Additionally, if the company only has customers for 4 million wheels, this is also not a restriction (additional customers may be obtained without a permit application).

Another example that some printers have utilized has to do with their ability to make sellable product. This limitation is a result of required setup time, required cleaning, and overlapping ink. Without setup and cleaning, the presses can not continue to make sellable product. This effectively lowers the operating hours of the press from 8760 hrs/yr to some lower value. If each cylinder of a press covers all of the product substrate with ink then the final product will be undesired and unsellable. Depending on the type of printing performed and the number of press cylinders, only a certain maximum percentage of the capacity can be utilized (newspaper printers will have a maximum capacity percentage that is lower than a color picture magazine).

These limitations will be considered in determining what regulations apply to each emission point. Other limitations exist but they must be evaluated on a case-by-case basis. Your unsubstantiated assertion is not enough. Clear and reasonable justification will be required before the limitation will be acknowledged by the division.

- 14) Briefly identify any stacks, vents, or control devices where emissions from the applicator are likely to enter the ambient air. A detailed description of the stacks, vents, and control devices should be provided in form DEP7007N.
- 15) Emission rates will vary with the coatings applied. The review process will be simplified if only the highest pollutant emission rates are identified. However, for different pollutants, different coatings will be relevant. For example, when painting, the paint with the highest particulate matter emission is usually different than the paint with the highest VOC content. By identifying the applicator, the pollutant, the coating, and the coating's composition, review by the division and regulatory applicability determinations are simplified.

Other relevant information about the coatings may be required. If this is the case, identify the information on a separate sheet. An example of other relevant information might be the solids content of the coating. If some information is required to demonstrate compliance with a regulation, then the other information is relevant and required.

Information provided in the K form will be used to describe the emission point and determine regulation applicability. If the information does not provide an adequate picture, then your permit may be delayed or possibly denied. If you verify your assertions with credible references and appropriate MSDSs, your permit will be clearer, more accurate, and possibly less burdensome (depending on the nature of the process and the requirements that may apply). If you have several options for demonstrating compliance with a regulation but you only care about a couple of the options, then indicate this in an attachment. If you feel that other information is important, include it. Your assistance at this juncture of the process is a wise investment of time and may save you a sizable portion of time in the future.